*Final-Approved 1/12/12*

# Water Quality Standards Advisory Committee

# MEETING MINUTES

**Thursday, October 13, 2011 1:30 pm – 3:30 pm**
**Department of Environmental Services**
**Rooms 112/113/114**
**29 Hazen Drive, Concord, NH**

## WQSAC Members Present

| Name | Representing | Present | Alternate Present |
|---|---|---|---|
| Dan Blais | Home Builders and Remodelers' Association of NH | Y | |
| Steve Clifton | Consulting Engineers of NH | | |
| Sam Demeritt | NH Wildlife Federation | Y | |
| Steve Densberger | Water Council | | |
| Diane Hanley | NH Association of Conservation Commissions and Lakes Management Advisory Committee | Y | |
| Donna Hanscom | NH Water Pollution Control Association | | |
| John Hodsdon | NH Farm Bureau Federation | Y | |
| Melissa Hoffer | Conservation Law Foundation | | |
| Kenneth Kimball | Appalachian Mountain Club | | |
| Michael Licata | Business and Industry Association | | |
| John Magee | NH Fish & Game Department | Y | |
| William McDowell | University of New Hampshire | | |
| Mike Metcalf | NH Water Works Association | Y | |
| Eileen Miller | NH Association of Conservation Districts | | |
| Larry Morse | NH Association of Natural Resource Scientists | Y | |
| Allan Palmer | Rivers Management Advisory Committee | | |
| Kenneth Rhodes | Associated General Contractors of NH | | |
| Peter Rice | NH Municipal Association | | |
| Dari Sassan | Office of State Planning | | |
| William Schroeder | NH Lakes Association | Y | |
| Jasen Stock | NH Timberland Owners Association | | |
| Ken Toppin | US Geological Survey | | |
| Michele Tremblay | NH Rivers Council | | |
| John Warner | US Fish & Wildlife Service | | |
| Ellen Weitzler | EPA Region I | Y | |

## Additional Meeting Attendees

Andy Fisk (CRWC)
Ron Rhodes (CRWC)
David Deen (CRWC)
Mark Hemmerlein (DOT)
John St. John (DOT rep.)
Rick Russell (Town of Salem)
Tim Fortier (NHMC)
David Brennan (City of Concord)
Rep. Judith Spang (House RR&D)
Ted Diers (DES)
Philip Trowbridge (DES)
Shane Csiki (NHGS)
Ken Edwardson (DES)
Brandon Kernen (DES)
Jocelyn Degler (DES)
Gregg Comstock (DES)
Amy Clark (DES)
Ridge Mauck (DES)
Owen David (DES)
Collis Adams (DES)

**1) Introductions**
The meeting began with a round of introductions.

**2) Approval of the 6/9/2011 Meeting Minutes**
Bill Schroeder asked for an approval of the minutes of the 6/9/11 meeting. A motion to approve the minutes was made by Sam Demeritt. The motion passed without opposition.

**3) Meeting schedule and election of Chair and Vice Chair for FFY12**
Bill Schroeder reminded the committee about the meeting schedule for the year* and officers. Bill Schroeder and Ken Rhodes are the current chair and vice chair, respectively. They offered to give up these positions if anyone else wanted to serve. Several members spoke in favor of continuing with the current officers. A motion was made to continue with Bill Schroeder as chair and Ken Rhodes as vice chair. The motion passed without opposition.
* October 13, 2011, January 12, 2012, April 12, 2012, July 12, 2012

**4) Update on Rulemaking/Legislation**
Ted Diers announced that the rulemaking proposal for Env-Wq 1708 passed JLCAR and was formally adopted. In the coming year, the DES priorities for rulemaking will be rules for the Water Quality Certification Program and changes to criteria for class A waters. Judith Spang mentioned that there are LSRs relevant to water quality standards for the coming legislative session. There will be more information on introduced bills by the January 12, 2012 meeting.

**5) Update from Classification Subcommittee**
Larry Morse summarized the work of the Classification Subcommittee, which met on October 6, 2011. The group has worked on designated uses for surface waters and is transitioning to wetlands. The subcommittee will help DES with a new grant directed at wetland water quality standards. Anyone who wants to participate in these discussions is welcome to join.

**6) Overview of the New Hampshire surface water quality criteria for turbidity, why it is important, and the process for updating criteria**
Phil Trowbridge presented the history of the New Hampshire water quality criteria for turbidity and the linkages to designated uses. (slides available)

**7) U.S. Environmental Protection Agency recommendations for criteria for turbidity and suspended and bedded sediment**
Ellen Weitzler of EPA presented federal guidance about turbidity and suspended and bedded sediments. (slides available)

**8) Turbidity criteria used by other states**
Owen David presented the turbidity criteria used by other states. (slides available)

**9) Background turbidity in New Hampshire waters**
Ken Edwardson presented an analysis of turbidity data to illustrate the typical background turbidity in NH lakes and streams. (slides available)

**10) Discussion**

There was a group discussion about the turbidity criteria. The major points are summarized below, followed by next steps.

- The turbidity criteria must be protective of all existing and designated uses.
- The turbidity criteria for class A waters ('none unless naturally occurring') is very difficult to meet and should be a priority for revision.
- It would be helpful to have rules or guidance that clearly explains the mechanics of setting up mixing zones and compliance monitoring for turbidity.
- The turbidity criteria should include some flexibility for large construction projects.
- For a given turbidity level, long-term (chronic) discharges will have a greater impact on designated uses than short-term (acute) stormwater discharges from construction sites. Literature indicates that the level (i.e., the magnitude) of turbidity that is tolerable to aquatic life is dependent on how long (i.e. the duration) the turbidity level lasts. In general, the shorter the duration, the higher the allowable turbidity level.
- The turbidity criteria for class B waters is essentially an end-of-pipe standard because there is no consideration of frequency or duration. It is possible to work around the end-of-pipe requirement with mixing zones. However, is it efficient or appropriate to establish a mixing zone for every discharge? Would it be better to have more flexibility in the standard similar to Connecticut's criteria?
- The criteria do not prevent high sediment loads due to anthropogenic activities or instream erosion. There can be cases where turbidity is below the criteria but there are high flows such that there is a high sediment load to downstream areas. What about the impacts of piecemeal residential development that all contribute to a larger problem? The turbidity criteria do not prevent this.
- What is the linkage between turbidity and sediment carrying capacity of a stream?
- Turbidity is often treated as a proxy for other pollutants (e.g., if turbidity is low, phosphorus loading is often low). We need to be aware of this consideration and should not set criteria for turbidity based only on direct impacts.
- Need to consider the trade off between more complicated turbidity criteria and ease of implementation for regulators and the regulated community.

Next steps

- DES will present/share more information about turbidity to the WQSAC and discuss whether a subcommittee is needed at the January 12, 2012 meeting.
- DES will share a report from the Piscataqua Region Estuaries Partnership (2010) on Erosion and Sedimentation Control Programs in the Piscataqua Region (see: http://www.prep.unh.edu/resources/pdf/review_of_erosion-fbea-10.pdf).
- DES will share a summary from the Oregon Department of Environmental Quality (2010) on the effects of turbidity on designated uses (see pp. 19-50 of http://www.deq.state.or.us/wq/standards/docs/Turbidity/10-WQ-022.pdf).

**11) Other Business**

None

**12) Adjourn**

The meeting was adjourned at 3:45 pm.